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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,302	08/11/2000	John Hood	TSRI 710.2	8590

7590 10/02/2002

Olson & Hierl LTD
20 North Wacker Drive
36th Floor
Chicago, IL 60606

EXAMINER
PROUTY, REBECCA E

ART UNIT	PAPER NUMBER
1652	

DATE MAILED: 10/02/2002 8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/637,302	Hood et al.
Examiner	**Art Unit**
Rebecca Prouty	1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-67 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claims 1-67 are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-6, 14-16 and 41, drawn to pharmaceutical compositions of kinase active Raf, classified in class 424, subclass 94.5.

II. Claims 1, 7-16 and 42, drawn to pharmaceutical compositions of kinase inactive Raf, classified in class 424, subclass 94.5.

III. Claims 1, 17-18, and 37-38, drawn to pharmaceutical compositions of nucleic acids encoding kinase active Raf, classified in class 514, subclass 44.

IV. Claims 1, 17-18, and 39-40, drawn to pharmaceutical compositions of nucleic acids encoding kinase inactive Raf, classified in class 514, subclass 44.

V. Claims 19-24 and 32-34, drawn to methods of stimulating angiogenesis by treating with compositions of kinase active Raf, classified in class 424, subclass 94.5.

VI. Claims 19, and 25-34, drawn to methods of inhibiting angiogenesis by treating with compositions of kinase inactive Raf, classified in class 424, subclass 94.5.

VII. Claims 19 and 35-36, drawn to methods of stimulating angiogenesis by treating with nucleic acids encoding

kinase active Raf, classified in class 514, subclass 44.

VIII Claims 19 and 35-36, drawn to methods of inhibiting angiogenesis by treating with nucleic acids encoding kinase inactive Raf, classified in class 514, subclass 44.

IX. Claims 43, and 47-49, drawn to pharmaceutical compositions of kinase active Ras, classified in class 424, subclass 94.5.

X. Claims 43-46, drawn to pharmaceutical compositions of kinase inactive Ras, classified in class 424, subclass 94.5.

XI. Claims 43, 57, and 61-64, drawn to pharmaceutical compositions of nucleic acids encoding kinase active Ras, classified in class 514, subclass 44.

XII. Claims 43, 57-60, and 64, drawn to pharmaceutical compositions of nucleic acids encoding kinase inactive Ras, classified in class 514, subclass 44.

XIII Claims 50 and 54-56, drawn to methods of stimulating angiogenesis by treating with compositions of kinase active Ras, classified in class 424, subclass 94.5.

XIV. Claims 50-53, drawn to methods of inhibiting angiogenesis by treating with compositions of kinase inactive Ras, classified in class 424, subclass 94.5.

XV. Claims 50 and 54, drawn to methods of stimulating angiogenesis by treating with nucleic acids encoding kinase active Ras, classified in class 514, subclass 44.

XVI. Claims 50 and 51, drawn to methods of inhibiting angiogenesis by treating with nucleic acids encoding kinase inactive Ras, classified in class 514, subclass 44.

XVII Claims 65 and 67, drawn to methods of stimulating angiogenesis by treating with compositions of Raf and Ras wherein one of said proteins is kinase active, classified in class 424, subclass 94.5.

XVIII. Claims 65-66, drawn to methods of inhibiting angiogenesis by treating with compositions of Raf and Ras wherein one of said proteins is kinase inactive, classified in class 424, subclass 94.5.

XIX. Claims 65 and 67, drawn to methods of stimulating angiogenesis by treating with nucleic acids encoding Raf and Ras wherein one of said proteins is kinase active, classified in class 514, subclass 44.

XX. Claims 65-66, drawn to methods of inhibiting angiogenesis by treating with nucleic acids encoding Raf and Ras wherein one of said proteins is kinase inactive, classified in class 514, subclass 44.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, IX, and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions, represent structurally different polypeptides. Therefore, where structural identity is required, such as for pharmaceutical effects or antibody reactivity the different proteins have different effects.

Inventions III, IV, XI, and XII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions, represent structurally different nucleic acids. Therefore, where structural identity is required, such as for

pharmaceutical effects or hybridization or expression the different nucleic acids have different effects.

The nucleic acids of Group III and the proteins of Group I are patentably distinct compounds because they are chemically different, the nucleic acids have other utility besides encoding the proteins such as a hybridization probe and the proteins can be made by another method such as chemical synthesis.

The proteins of Group I are unrelated to the nucleic acids of Groups IV, XI and XII as they are unrelated chemical compounds and the proteins of Group I are not encoded by the nucleic acids of Groups IV, XI and XII.

The nucleic acids of Group IV and the proteins of Group II are patentably distinct compounds because they are chemically different, the nucleic acids have other utility besides encoding the proteins such as a hybridization probe and the proteins can be made by another method such as chemical synthesis.

The proteins of Group II are unrelated to the nucleic acids of Groups III, XI and XII as they are unrelated chemical compounds and the proteins of Group II are not encoded by the nucleic acids of Groups III, XI and XII.

The nucleic acids of Group XI and the proteins of Group IX are patentably distinct compounds because they are chemically different, the nucleic acids have other utility besides encoding

the proteins such as a hybridization probe and the proteins can be made by another method such as chemical synthesis.

The proteins of Group IX are unrelated to the nucleic acids of Groups III, IV and XII as they are unrelated chemical compounds and the proteins of Group IX are not encoded by the nucleic acids of Groups III, IV and XII.

The nucleic acids of Group XII and the proteins of Group X are patentably distinct compounds because they are chemically different, the nucleic acids have other utility besides encoding the proteins such as a hybridization probe and the proteins can be made by another method such as chemical synthesis.

The proteins of Group X are unrelated to the nucleic acids of Groups III, IV and XI as they are unrelated chemical compounds and the proteins of Group X are not encoded by the nucleic acids of Groups III, IV and XI.

Inventions I and V or XVII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the protein can be used

as a kinase or to induce antibodies and the method can be practiced with the products of Groups III, IX and XI.

The proteins of Group I are distinct from the methods of Groups VI-VIII, XIII-XVI and XVIII-XX as the protein is neither made nor used by the methods of Groups VI-VIII, XIII-XVI and XVIII-XX.

Inventions II and VI or XVIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the protein can be used to induce antibodies and the method can be practiced with the products of Groups IV, X and XII.

The proteins of Group II are distinct from the methods of Groups V, VII, VIII, XIII-XVII and XIX-XX as the protein is neither made nor used by the methods of Groups V, VII, VIII, XIII-XVII and XIX-XX.

Inventions III and VII or XIX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another

materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acids can be used to produce the protein of Group I and the method can be practiced with the products of Groups I, IX and XI.

The nucleic acids of Group III are distinct from the methods of Groups V, VI, VIII, XIII-XVIII and XX as the nucleic acids are neither made nor used by the methods of Groups V, VI, VIII, XIII-XVIII and XX.

Inventions IV and VIII or XX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acids can be used to produce the protein of Group II and the method can be practiced with the products of Groups II, X and XII.

The nucleic acids of Group IV are distinct from the methods of Groups V-VII and XIII-XIX as the nucleic acids are neither made nor used by the methods of Groups V-VII and XIII-XIX.

Inventions IX and XIII or XVII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the protein can be used as a kinase or to induce antibodies and the method can be practiced with the products of Groups I, III and XI.

The proteins of Group IX are distinct from the methods of Groups V-VIII, XIV-XVI and XVIII-XX as the protein is neither made nor used by the methods of Groups V-VIII, XIV-XVI and XVIII-XX.

Inventions X and XIV or XVIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the protein can be used

to induce antibodies and the method can be practiced with the products of Groups II, IV, and XII.

The proteins of Group X are distinct from the methods of Groups V-VIII, XIII, XV-XVII and XIX-XX as the protein is neither made nor used by the methods of Groups V-VIII, XIII, XV-XVII and XIX-XX.

Inventions XI and XV or XIX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acids can be used to produce the protein of Group IX and the method can be practiced with the products of Groups I, III, and IX.

The nucleic acids of Group XI are distinct from the methods of Groups V-VIII, XIII, XIV, XVI-XVIII and XX as the nucleic acids are neither made nor used by the methods of Groups V-VIII, XIII, XIV, XVI-XVIII and XX.

Inventions XII and XVI or XX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another

materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acids can be used to produce the protein of Group X and the method can be practiced with the products of Groups II, IV and X.

The nucleic acids of Group XII are distinct from the methods of Groups V-VIII, XIII-XV and XVII-XIX as the nucleic acids are neither made nor used by the methods of Groups V-VIII and XIII-XV and XVII-XIX.

The methods of Groups V-VIII and XIII-XX are independent as they comprise different steps, utilize different products and/or produce different results.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicants should note that Claims 1, 14-19, 32-34, 43, 50, 51, 54, 57, and 64-67 are included within more than one group.

Each of these claims will be examined only to the extent they recite the subject matter of the elected group.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rebecca Prouty, Ph.D. whose telephone number is (703) 308-4000. The examiner can normally be reached on Monday-Friday from 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy, can be reached at (703) 308-3804. The fax phone number for this Group is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Rebecca Prouty
Primary Examiner
Art Unit 1652